WHAT IS CLAIMED IS:

1. A method for vaporization of liquid organic feedstock made of an organic monomer or an organic oligomer capable of forming an organic polymer insulation film by feeding the liquid organic feedstock to a vaporization controller, which comprises:

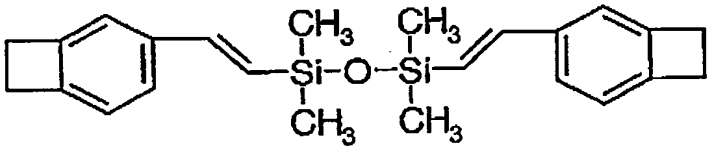
a first step of mixing the liquid organic feedstock with a carrier gas at a temperature lower than a heat polymerization reaction starting temperature of the liquid organic feedstock to form a gas-liquid mixed fluid;

a second step of spraying the gas-liquid mixed fluid on a vaporization vacuum chamber to form an aerosol of the liquid organic feedstock and heating the aerosol; and

a third step of vaporizing the liquid organic feedstock through the aerosol.

2. The method as claimed in claim 1, wherein the aerosol has a diameter of 100 to 1 μm.

3. The method as claimed in claim 1, wherein the liquid organic feedstock is a divinylsiloxanebisbenzocyclobutene monomer represented by the formula.



4. The method as claimed in claim 1, wherein

said first step is that the gas-liquid mixed fluid made of 100 to 500 ml/min of the carrier gas and 0.1 to 0.5 g/min of the liquid organic feedstock in a standard condition,

said second step being that the gas-liquid mixed fluid is sprayed on the vaporization vacuum chamber held at 1.3 kPa (10 torr) or less,

and

said third step being that the gas-liquid mixed fluid is heated at a temperature of 160 to 250℃ to vaporize the liquid organic feedstock.

5. A method of growing an insulation film on a substrate by the use of a process for vaporization of a liquid organic feedstock, said insulation film being an organic polymer film made of the liquid organic feedstock, said process comprises:

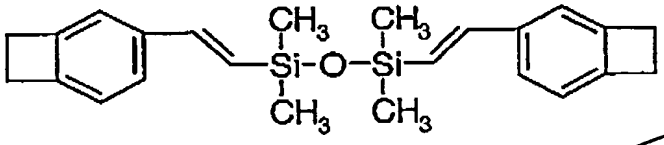
a first step of mixing the liquid organic feedstock with a carrier gas at a temperature lower than a heat polymerization reaction starting temperature of the liquid organic feedstock to form a gas-liquid mixed fluid;

a second step of spraying the gas-liquid mixed fluid on a vaporization vacuum chamber to form an aerosol of the liquid organic feedstock and heating the aerosol; and

a third step of vaporizing the liquid organic feedstock through the aerosol.

6. The method as claimed in claim 5, wherein the aerosol has a diameter of 100 to 1 μm.

7. The method as claimed in claim 5, wherein the liquid organic feedstock is a divinylsiloxanebisbenzocyclobutene monomer represented by the formula.



8. The method as claimed in claim 8, wherein

said first step is that the gas-liquid mixed fluid made of 100 to 500 ml/min of the carrier gas and 0.1 to 0.5 g/min of the liquid organic feedstock in a standard condition,

said second step being that the gas-liquid mixed fluid is sprayed on the vaporization vacuum chamber held at 1.3 kPa (10 torr) or less, and

said third step being that the gas-liquid mixed fluid is heated at a temperature of 160 to 250°C to vaporize the liquid organic feedstock.

9. A method for growth of an insulation film, wherein a vaporization device for heating an aerosol of liquid organic feedstock to vaporize the liquid organic feedstock through the aerosol and form the vaporized organic feedstock is directly connected with a plasma polymerization reaction chamber, and the vaporized organic feedstock is directly fed to plasma in the plasma polymerization reaction chamber to grow an organic polymer film made of the liquid organic feedstock on a substrate.